

Smoking habits of parents attending a children's hospital

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This exploratory study surveyed 418 parents attending a paediatric hospital in order to establish their smoking habits and preparedness to quit. We found that 27% were current smokers, of whom 81% were willing to try and quit in the near future. These and the parent's other responses to a questionnaire will be used to develop a programme of smoking cessation for parents attending a children's hospital.

Children exposed to tobacco smoke are at increased risk for many conditions including several respiratory illnesses.¹ A smoking cessation programme targeting parents could lead to reduced morbidity in children, although this hypothesis remains untested.

A recent Cochrane review of smoking cessation in parents² found positive outcomes in only four of the 18 intervention studies considered and concluded that the optimum approach to smoking cessation in parents is not clear and that smoking cessation programmes for adults in an adult health setting are not necessarily transferable to adults in the context of child health. There are a number of strategies for smoking cessation in parents³ and different strategies may be needed in different settings. In the present report we present the results of an exploratory study designed to facilitate the future development of a smoking cessation programme targeted at parents attending a children's hospital.

METHODS

Protocol

A questionnaire was designed by the authors, piloted and then completed by parents/guardians attending five wards at Royal Aberdeen Children's Hospital in April 2006. Smoking and non-smoking parents were eligible.

Questionnaire

A questionnaire (see appendix A) was developed by the authors and colleagues from the Smoking Advisory Service. Basic demographics and smoking history were determined (Q1 to 7). Parental smoking habits and preparedness to quit were ascertained with questions recommended by the Tobacco Committee of the British Thoracic Society (Q8, 9 and 10). Information on other factors relevant to the delivery of a smoking cessation programme was also sought (Q11 to 14). Finally, a smoking history in grandparents and partners was taken (Q15 to 17) to identify other sources of tobacco smoke exposure. Prior to the study, the research nurse (MM) gave presentations to the ward area multidisciplinary team. Nursing staff distributed the anonymous questionnaires. There was no selection for parents who did or did not smoke. The questionnaire was piloted in 25 parents and then distributed to 100 consecutive parents attending each of the following clinical areas: day case unit, paediatric assessment unit, out-patients department, and surgical and medical wards.

Ethical approval

This study was approved by the Grampian medical ethics committee.

RESULTS

Five hundred questionnaires were issued and 415 were returned (83%). Five parents refused to participate and the remaining 80 questionnaires were not distributed within the month. The mean age of respondents was 35 years (range 15–59) and 334 (80%) of respondents were female. The proportion of male respondents did not differ across the five clinical areas and questionnaire responses did not differ between males and females.

Smoking habits and preparedness to quit

A total of 203 (49%) respondents had never smoked, 114 (27%) were current smokers and 98 (24%) were ex-smokers. The median time (range) since quitting was 4.5 years (1 week–35 years). Of the current smokers, 84 (74%) had previously tried to quit; 15 of these had tried only once, 43 had tried 2–3 times and 26 had tried more than 3 times. The two most common reasons for not succeeding in quitting were lack of willpower (27 respondents) and "stress" (17 respondents), while other reasons included weight gain (four), boredom (three) and not ready to quit (three). Of the current smokers, 78 (68%) said they would be willing to try quitting again, and of these 44 rated this as "important" and 34 as "very important" to them. Finally, 92 (81%) current smokers stated they would be willing to try and stop smoking in the near future. The proportion of smokers and their preparedness to quit ranged from a minimum of 23% in the out-patients' department to a maximum of 34% on the paediatric assessment unit, but the trend across the five clinical areas was not significant ($\chi^2_4 = 3.4$, $p = 0.496$).

Other factors relevant to delivering smoking cessation

Twenty two (19%) children of smokers had a "respiratory problem" and their parent's preparedness to quit was consistent with that of other parents. The majority of smoking parents (79, or 70%) did not want their child to be involved in smoking cessation. Half of the parents (57) expressed a preference for evening sessions, the proportion preferring morning or afternoon sessions was equal (11%) and the remainder did not express a preference.

Smoking habits of parent's partners and own parents

The partners of 58 (51%) current smokers were also current smokers compared with 47 (16%) partners of 300 non- or ex-smokers where data were available, odds ratio 6.0 (95% confidence interval (CI) 3.7 to 9.8), $p < 0.001$. The children of respondents who currently smoked were more likely to have grandparents who currently smoked compared with other children, odds ratio 2.4 (95% CI 1.6 to 3.9), $p < 0.001$.

DISCUSSION

The present study is the first of which we are aware that has surveyed the smoking habits of parents attending a children's hospital in the UK. The main finding was that smoking parents expressed a strong desire to quit. The study also reports on factors relevant to parents that will be important to the development of a smoking cessation programme for parents.

This study has demonstrated that the 27% prevalence of smoking among parents (mostly mothers) attending hospital with their child was higher than for adults in the local population. The 2002 Grampian Adult Lifestyle Survey reported regular smoking among 20% of women and 34% of men aged 25–34 and among 22% of women and men aged 35–44 years. Smoking and childhood morbidity are both associated with low socioeconomic status, which may explain the relatively higher prevalence of smokers among those surveyed. As very few parents refused to complete the survey, it is unlikely that refusal by smoking parents to participate created a substantial bias.

Some of the results of our survey may influence the design of a smoking cessation programme. First, preparedness to quit among smoking parents did not differ significantly across the clinical areas; a study from North America⁴ has been interpreted as indicating admission to hospital is a unique opportunity to enrol parents who smoke into cessation programs, but our results suggest that recruitment into an intervention study is unlikely to be increased by focussing on parents of children who are inpatients. Second, there was no indication that preparedness to quit was more likely in parents of children with respiratory illnesses, a finding which was not consistent with the results of a study in the USA⁵ where parents of children with respiratory illnesses were more motivated to quit. The numbers of participants included in the present study were comparable to those included in the American studies,^{4,5} but our study may have been underpowered to detect minor differences in preparedness to quit between parents of children admitted to hospital or with respiratory conditions and other parents. Third, the survey showed that in this predominantly female population, delivery of child care was not needed as part of a smoking cessation programme; presumably partners or other relatives would care for the children in the evenings when the majority preferred to attend for smoking cessation advice. Fourth, based on the survey findings we will not involve the children as part of the smoking cessation advice, in

contrast with studies in the USA where children of smokers are taught about the adverse health effects of smoke exposure and encouraged to ask parents not to smoke in the car and house.

Our study confirmed the findings of other studies where smokers have been found to be more likely to have parents who smoke, and this assures us that smoking cessation has the potential to interrupt a family history of smoking to the benefit of future generations. Our study also found that partners of a majority of smoking parents also smoked. Successful smoking cessation in one parent may be of limited benefit to children if a second adult in the house continues to smoke, and intervention studies will need to address this important issue.

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APPENDIX A

Please circle where appropriate

Q1. Your age: ____	Age of child/children ____		
Q2. Your gender:	Male/Female		
Q3. Do you regularly smoke?	Yes (please go to Q6)	No (Please go to Q4)	
Q4. Have you ever smoked?	Yes	No (Please go to Q15)	
Q5. How long ago did you quit?	Please go to Q15 now		
Q6. Have you ever tried to quit?	Yes - How many times ____	No	
Q7. Why did you not succeed?			
Q8. Do you want to quit?	Yes	No	
Q9. How important is it to you to quit?	Not important	Important	Very Important
Q10. Would you be prepared to quit in the near future?	Yes	No	
Q11. Does your child/children suffer from any respiratory problems?	Yes	No	
If "Yes" to Q11, is this the reason for your visit today?	Yes	No	
Q12. Do you think it is appropriate for your child to be involved in the smoking cessation?	Yes	No	
Q13. Would you require childcare to attend smoking cessation?	Yes	No	
Q14. What would be the most convenient time to attend a smoking cessation session?	Morning	Afternoon	Evening
Q15. Do any of your child's grandparents currently smoke?	Yes	No	
Q16. Do you have a partner who smokes?	Yes	No	
Q17. Would they like to quit?	Yes	No	Unsure

Please add any further comments:.....

Thank you for completing this questionnaire. If you have expressed an interest in stopping smoking please contact the Smoking Advice Service on (local number), the Smokers Helpline on 0800 84 84 84 or speak to your own GP.